

**IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF TEXAS  
WACO DIVISION**

WSOU INVESTMENTS, LLC d/b/a  
BRAZOS LICENSING AND  
DEVELOPMENT,

Plaintiff,

v.

ZTE CORPORATION,

Defendant.

§ CIVIL ACTION NO. 6:20-cv-487-ADA  
§ CIVIL ACTION NO. 6:20-cv-488-ADA  
§ CIVIL ACTION NO. 6:20-cv-489-ADA  
§ CIVIL ACTION NO. 6:20-cv-490-ADA  
§ CIVIL ACTION NO. 6:20-cv-491-ADA  
§ CIVIL ACTION NO. 6:20-cv-492-ADA  
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§ CIVIL ACTION NO. 6:20-cv-496-ADA  
§ CIVIL ACTION NO. 6:20-cv-497-ADA

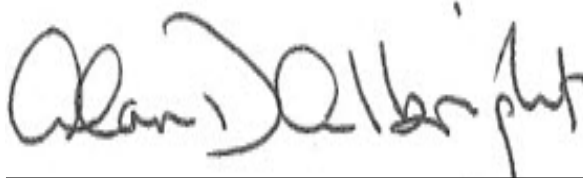
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**JURY TRIAL DEMANDED**

**CLAIM CONSTRUCTION ORDER**

The Court held a *Markman* hearing on March 3, 2022. During that hearing, the Court provided its final constructions. The Court now enters those claim constructions.

**SIGNED** this 3rd day of March, 2022.



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ALAN D ALBRIGHT  
UNITED STATES DISTRICT JUDGE

**A. Group 1 Patents (Nos. 6:20-cv-00487, -00488, -00494, -00496)**

<b>U.S. Patent No. 7,489,929 (Case No. 6:20-cv-00488-ADA)</b>				
<b>Claim(s)</b>	<b>Claim Term</b>	<b>Plaintiff's Proposed Construction</b>	<b>Defendant's Proposed Construction</b>	<b>Court's Final Construction</b>
11	“buffering bearer traffic” (claim 11)  (Proposed by Defendant)	Plain and ordinary meaning	“During a handoff process, all data from the mobile station is buffered at the mobile station or all data at the network side is buffered at the network side until the handoff process is complete.”	Plain-and-ordinary meaning
14	“characteristic” (claims 14)  (Proposed by Defendant)	Plain and ordinary meaning; not indefinite	Indefinite under 35 U.S.C. § 112(b)	Not indefinite. Plain-and-ordinary meaning.
14	“replacement hysteresis” (claims 14)  (Proposed by Defendant)	Plain and ordinary meaning; not indefinite	Indefinite under 35 U.S.C. § 112(b)	Not indefinite. Plain-and-ordinary meaning.
<b>U.S. Patent No. 7,742,534 (Case No. 6:20-cv-00496-ADA)</b>				
<b>Claim(s)</b>	<b>Claim Term</b>	<b>Plaintiff's Proposed Construction</b>	<b>Defendant's Proposed Construction</b>	<b>Court's Final Construction</b>
4, 7	“maximal number of sub-carriers” (claim 4) / “maximum number of sub-carriers” (claim 7)  (Proposed by Defendant)	Plain and ordinary meaning; not indefinite.	Indefinite under 35 U.S.C. § 112(b)	Not indefinite. Plain-and-ordinary meaning.

6	<p>“means for selecting a set of sub-carriers from the plurality of sub-carriers on which user data is to be communicated from a transmitter to a receiver” (claim 6)</p> <p>(Proposed by Defendant)</p>	<p>Governed by pre-AIA 35 U.S.C. § 112, ¶6; not indefinite.</p> <p><b>Function:</b> selecting a set of sub-carriers from the plurality of sub-carriers on which user data is to be communicated from a transmitter to a receiver.</p> <p><b>Structure:</b> transmitter configured to perform corresponding operation(s), such as, (i) receive quality levels from receiver, (ii) transmit threshold indication to receiver, (iii) select the set of sub-carriers based at least in part on either the received quality level or the transmitted threshold indication (or both).</p>	<p>Governed by 35 U.S.C. § 112(f)</p> <p><b>Function:</b> selecting a set of sub-carriers from the plurality of sub-carriers on which user data is to be communicated from a transmitter to a receiver.</p> <p><b>Structure:</b> none disclosed. Indefinite under 35 U.S.C § 112(b).</p>	<p>Subject to § 112, ¶ 6.</p> <p><b>Function:</b> selecting a set of sub-carriers from the plurality of sub-carriers on which user data is to be communicated from a transmitter to a receiver.</p> <p><b>Structure:</b> transmitter as described in Fig. 3 and corresponding text, and equivalents.</p>
6	<p>“means for determining quality levels for sub-carriers” (claim 6)</p> <p>(Proposed by Defendant)</p>	<p>Not governed by pre-AIA 35 U.S.C. § 112, ¶6; not indefinite.</p> <p>But if deemed governed by pre-AIA 35 U.S.C. § 112, ¶6, then:</p> <p><b>Function:</b> determining quality levels for sub-carriers</p> <p><b>Structure:</b> receiver configured to perform corresponding operation(s), such as measure the SIR for sub carriers (see, e.g., 5:19-24).</p>	<p>Governed by 35 U.S.C. § 112(f)</p> <p><b>Function:</b> determining quality levels for sub-carriers</p> <p><b>Structure:</b> none disclosed. Indefinite under 35 U.S.C. § 112(b).</p>	<p>Subject to § 112, ¶ 6</p> <p><b>Function:</b> determining quality levels for sub-carriers</p> <p><b>Structure:</b> receiver as described in Fig. 4 and corresponding text, and equivalents.</p>

1, 2, 3, 5-9, 13, 16-18	“quality levels” (claims 1, 2, 3, 5-9, 13, 16-18)  (Proposed by Defendant)	Plain and ordinary meaning	“One of a signal-to-interference ratio, a bit error rate, or a modulation scheme.”	Plain-and-ordinary meaning
1, 6, 16	“as a function of” (claims 1, 6, 16)  (Proposed by Defendant)	Plain and ordinary meaning	“One of a signal-to-interference ratio, a bit error rate, or a modulation scheme.”	Plain-and-ordinary meaning
<b>U.S. Patent No. 8,451,839 (Case No. 6:20-cv-00487-ADA)</b>				
<b>Claim(s)</b>	<b>Claim Term</b>	<b>Plaintiff’s Proposed Construction</b>	<b>Defendant’s Proposed Construction</b>	<b>Court’s Final Construction</b>
1, 3, 6, 8, 11	“route” (claims 1, 6, 11) / “route-related information” (claims 1, 3, 6, 8)  (Proposed by Defendant)	Plain and ordinary meaning; not indefinite.	Indefinite under 35 U.S.C. § 112(b)	Not indefinite. Plain-and-ordinary meaning.
1, 6	“said predefined using time indicates[ing] a [the] using time of said route” (claims 1, 6)  (Proposed by Defendant)	Plain and ordinary meaning; not indefinite.	Indefinite under 35 U.S.C. § 112(b)	Not indefinite. Plain-and-ordinary meaning.
6	“the using time” (claim 6)  (Proposed by Defendant)	Plain and ordinary meaning; not indefinite.	Indefinite for lack of antecedent basis under 35 U.S.C. § 112(b).	Not indefinite. Plain-and-ordinary meaning.
<b>U.S. Patent No. 9,185,036 (Case No. 6:20-cv-00494-ADA)</b>				
<b>Claim(s)</b>	<b>Claim Term</b>	<b>Plaintiff’s Proposed Construction</b>	<b>Defendant’s Proposed Construction</b>	<b>Court’s Final Construction</b>

1, 6-10, 12, 17-21, 23-24	<p>“data flow” (claims 1, 6-10, 12, 17–21, 23–24) / “to enable thereby the control of at least one data flow” (claims 1, 12, 23–24) / “data flow is controlled” (claim 7–9, 18–20) / “a data flow” (claims 1, 6, 17, 23) / “the data flow” (claim 7–9, 18–20)</p> <p>(Proposed by Defendant)</p>	Plain and ordinary meaning (for each one of the <u>five</u> disputed phrases); none of the <u>five</u> disputed phrases is indefinite.	Indefinite under 35 U.S.C. § 112(b).	Not indefinite. Plain-and-ordinary meaning.
1-4, 6, 12-15, 17, 23-24	<p>“congestion condition to enable thereby the control of at least one data flow in a manner tending to reduce the congestion condition” (claims 1, 12, 23, 24) / “congestion condition” (claims 1–4, 6, 12–15, 17, 23–24) / “indication that a congestion condition exists” (claims 1, 23)</p> <p>(Proposed by Defendant)</p>	Plain and ordinary meaning (for each one of the <u>three</u> disputed phrases); none of the <u>three</u> disputed phrases is indefinite.	Indefinite under 35 U.S.C. § 112(b).	<p>N/A</p> <p><b>The Court previously increased the limit on the number of claim terms from 10 to 12. Because Defendant exceeded even that increased limit, the Court will not construe these terms.</b></p>

**B. Group 2 Patents (Nos. 6:20-cv-00489, -00492, -00495)**

U.S. Patent No. 7,487,240 (Case No. 6:20-cv-00489-ADA))				
Claim(s)	Claim Term	Plaintiff's Proposed Construction	Defendant's Proposed Construction	Court's Final Construction
1, 6, 13	“verifying connectivity in the network relating to at least Layer-2 and Layer-3 objects” (claims 1, 6, and 13)  (Proposed by Defendant)	Plain and ordinary meaning; not indefinite.	Indefinite under 35 U.S.C. § 112(b)	Not indefinite. Plain-and-ordinary meaning.
1, 6, 13	“a given containment hierarchy” (claims 1, 6, and 13)  (Proposed by Defendant)	Plain and ordinary meaning; not indefinite.	Indefinite under 35 U.S.C. § 112(b)	Not indefinite. Plain-and-ordinary meaning.
1, 6, 13	“the connectivity verification result(s) associated with the alarm” (claims 1, 6, and 13)  (Proposed by Defendant)	Plain and ordinary meaning; not indefinite.	Indefinite under 35 U.S.C. § 112(b)	Not indefinite. Plain-and-ordinary meaning.
U.S. Patent No. 8,147,071 (Case No. 6:20-cv-00492-ADA)				
Claim(s)	Claim Term	Plaintiff's Proposed Construction	Defendant's Proposed Construction	Court's Final Construction
1, 9, 13, 14	“the processor” / “wherein the processor is configured to” (claims 1, 9, 13, and 14)  (Proposed by Defendant)	Plain and ordinary meaning; not indefinite.	Indefinite under 35 U.S.C. § 112(b)	Preambles are not limiting except for “processor” in Claim 1 “processor(s)” in Claim 14

				Not indefinite. Plain-and-ordinary meaning.
1, 9, 13, 14	<p>“movement signalling” / “receiv[ing] movement signalling associated with the movement of the projector” / “corresponding movement signalling” (claims 1, 9, 13, and 14)</p> <p>(Proposed by Defendant)</p>	Plain and ordinary meaning; not indefinite.	Indefinite under 35 U.S.C. § 112(b)	Not indefinite. Plain-and-ordinary meaning.
1, 13, 14	<p>“discriminate” / “discriminate a movement criterion” / “the processor is configured to discriminate a movement criterion” (claims 1, 13, 14)</p> <p>(Proposed by Defendant)</p>	Plain and ordinary meaning; not indefinite.	Indefinite under 35 U.S.C. § 112(b)	Not indefinite. Plain-and-ordinary meaning.
1, 13, 14	<p>“provide associated image data signalling to project associated image data” (claims 1, 13, 14)</p> <p>(Proposed by Defendant)</p>	Plain and ordinary meaning; not indefinite.	Indefinite under 35 U.S.C. § 112(b)	Not indefinite. Plain-and-ordinary meaning.
9	<p>“a movement sensor configured to detect movement of the apparatus and/or a projector” (claim 9)</p> <p>(Proposed by Defendant)</p>	Plain and ordinary meaning; not indefinite.	Indefinite under 35 U.S.C. § 112(b)	Not indefinite. Plain-and-ordinary meaning.

<b>U.S. Patent No. 9,258,232 (Case No. 6:20-cv-00495-ADA)</b>				
<b>Claim(s)</b>	<b>Claim Term</b>	<b>Plaintiff's Proposed Construction</b>	<b>Defendant's Proposed Construction</b>	<b>Court's Final Construction</b>
1, 14	<p>“instructions for execution by a traffic flow control system for performing flow control on a flow of data packets for transmission over a link” (claim 14)</p> <p>“flow control” (claim 1)</p> <p>(Proposed by Defendant)</p>	<p>Not indefinite and not subject to 35 U.S.C. § 112, ¶6; Plain and ordinary meaning.</p> <p>Plain and ordinary meaning</p>	<p>Governed by 35 U.S.C. § 112(f)</p> <p><b>Function:</b> execution by a traffic flow control system for performing flow control on a flow of data packets for transmission over a link</p> <p>Indefinite under 35 U.S.C. § 112(b);</p> <p><b>Structure:</b> none disclosed</p> <p>“regulate movement of a series of data packets”</p>	<p>Preamble is not limiting. No construction is necessary.</p> <p>Plain-and-ordinary meaning</p>
1, 14	<p>“transmission over a link” (claims 1 &amp; 14)</p> <p>(Proposed by Defendant)</p>	<p>Plain and ordinary meaning; not indefinite.</p>	<p>Indefinite under 35 U.S.C. § 112(b)</p>	<p>Not indefinite. Plain-and-ordinary meaning.</p>
14	<p>“instructions for receiving, by a controller of the traffic flow control system, a backpressure signal, wherein the back pressure signal indicates a</p>	<p>Not indefinite and not subject to 35 U.S.C. § 112, ¶6; Plain and ordinary meaning.</p>	<p>Governed by 35 U.S.C. § 112(f)</p> <p><b>Function:</b> receiving, by a controller of the traffic flow control system, a backpressure signal, wherein the back</p>	<p>Not subject to 35 U.S.C. § 112, ¶6. Plain and ordinary meaning.</p>



	period of congestion” (claim 14)  (Proposed by Defendant)		pressure signal indicates a period of congestion  Indefinite under 35 U.S.C. § 112(b);  <b>Structure:</b> none disclosed	
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C. Group 3 Patents (Nos. 6:20-cv-00490, -00491, -00493, -00497)

U.S. Patent No. 7,203,505 (Case No. 6:20-cv-00497)				
Claim(s)	Claim Term	Plaintiff’s Proposed Construction	Defendant’s Proposed Construction	Court’s Final Construction
1, 14, 23	“a formatter to format the received data into at least one SMS (Short Message Service) message” / “formatting” / “formatter to format” (Claims 1, 14, 23)  (Proposed by Defendant)	Not indefinite and not subject to 35 U.S.C. § 112, ¶6; Plain and ordinary meaning.	Governed by 35 U.S.C. § 112(f)  <b>Function:</b> formatting the received data into at least one SMS (Short Message Service) message  Indefinite under 35 U.S.C. § 112(b); specification fails to describe it  <b>Structure:</b> none disclosed	Claims 1 and 23: Plain and ordinary meaning. Not indefinite and not a means-plus-function term.  “formatter to format...” in claim 14 is subject to § 112 ¶ 6.  <u>Function</u> (claim 14): formatting the received data into at least one SMS message.  <u>Structure</u> (claims 14): code stored in the mobile terminal programmed with an algorithm to insert the received data into one SMS message if it fits, as shown in Fig. 2, and otherwise to other insert the received data into more than one SMS message as shown in Fig. 3.

1, 14, 23	“SMS (Short Message Service)” (Claims 1, 14, 23  (Proposed by Defendant)	Plain and ordinary meaning	“Cellular based messages of limited size consisting of text and numbers.”	Plain and ordinary meaning.
U.S. Patent No. 8,179,960 (Case No. 6:20-cv-00490)				
Claim(s)	Claim Term	Plaintiff’s Proposed Construction	Defendant’s Proposed Construction	Court’s Final Construction
1-3, 9-10, 15-17, 23-24	“virtual reference” (Claims 1, 2, 3, 9, 10, 15, 16, 17, 23, and 24)  (Proposed by Defendant)	“A group of pixels (e.g., a block) that is used as reference material for encoding portions of the video signal (e.g., a motion-compensated inter-predicted block), but that does not comprise or represent any portion of the actual video sequence to be displayed.”	“A group of pixels used as reference material for encoding portions of the video signal, but that does not comprise or represent any portion of the actual video sequence to be displayed.”	“A group of pixels that is used as reference material for encoding portions of the video signal, but that does not comprise or represent any portion of the actual video sequence to be displayed.”
1, 9, 15, 23	“does not represent any portion of any individual frame of the original video signal” (Claims 1, 9, 15, 23)  (Proposed by Defendant)	Plain and ordinary meaning	“Data generated based on a portion of a video signal but not to be displayed with the video signal.”	Plain and ordinary meaning.
3, 17	“minimize differences” (Claims 3 and 17)  (Proposed by Defendant)	Plain and ordinary meaning; not indefinite.	Indefinite under 35 U.S.C. § 112(b)	Plain and ordinary meaning; not indefinite.
U.S. Patent No. 8,730,905 (Case No. 6:20-cv-00491)				
Claim(s)	Claim Term	Plaintiff’s Proposed Construction	Defendant’s Proposed Construction	Court’s Final Construction

4, 15	“during a time interval between data transmission intervals during the transmission period” (Claims 4, 15)  (Proposed by Defendant)	Plain and ordinary meaning; not indefinite.	Indefinite under 35 U.S.C. § 112(b)	Plain and ordinary meaning; not indefinite.
5, 16	“at least one frequency channel indicator” (Claims 5, 16)  (Proposed by Defendant)	Plain and ordinary meaning; not indefinite.	Indefinite under 35 U.S.C. § 112(b)	Plain and ordinary meaning, which is at least one “frequency channel indicator.” Not indefinite.
9, 21	“causing the transmission of the reservation message on each frequency band separately” (Claims 9, 21)  (Proposed by Defendant)	Plain and ordinary meaning; not indefinite.	Indefinite under 35 U.S.C. § 112(b)	Plain and ordinary meaning, where “separately” refers to separate frequency bands.
U.S. Patent No. 9,294,060 (Case No. 6:20-cv-00493)				
<b>Claim(s)</b>	<b>Claim Term</b>	<b>Plaintiff’s Proposed Construction</b>	<b>Defendant’s Proposed Construction</b>	<b>Court’s Final Construction</b>
1, 10	“extracting a feature vector” (Claims 1, 10)  (Proposed by Defendant)	Plain and ordinary meaning; not indefinite.	Indefinite under 35 U.S.C. § 112(b)	Plain and ordinary meaning; not indefinite.
1, 10	“level value is attenuated” (Claims 1, 10)  (Proposed by Defendant)	Plain and ordinary meaning; not indefinite.	Indefinite under 35 U.S.C. § 112(b)	Plain and ordinary meaning; not indefinite.

1, 10	<p>“spectral shape parameter” (Claims 1, 10)</p> <p>(Proposed by Defendant)</p>	Plain and ordinary meaning	“A sub band energy level value or a sub band gain factor based on the sub band energy level value”	Plain and ordinary meaning.
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